Agreement WM-GM-087 Quarterly Report July 3, 2006

Report Period

Pursuant to the agreement, this report covers the activities of the Clark Fork Task Force for initial period of April through June 30, 2006.

Task Force Activities

<u>Task Force Meetings</u> - During this period, the Task Force met three times, on April 4, May 1, and June 5, 2006. I arranged, facilitated, and summarized each of these meetings. Highlights from the meetings follow. The complete summary of each meeting is attached below in Appendix 1.

April 4, 2006 - The Task Force continued planning for the ground water technical and policy conferences and directed its facilitator to explore possible sources of funding for them. It heard presentations regarding the progress of the Montana Department of Natural Resources and Conservation (DNRC) Ground Water-Surface Water Working Group and the negotiations between the United States Forest Service (USFS) and the Montana Reserved Water Rights Compact Commission concerning the USFS compact.

May 1, 2006 - The Task Force heard a report on the recent decision by the Montana Supreme Court in the Smith River case and discussed its implications for surface and ground water permitting and management. The Task Force also continued refining the design of the ground water conferences and discussed possible DNRC funding for them.

June 5, 2006 - The Task Force continued work on the ground water conferences' budgets, agenda, and possible speakers. It discussed the implications of the proposed decision by a DNRC hearings examiner to deny a surface water right permit application submitted by Thompson River Lumber Company.

Ground Water Conferences - As directed by the Task Force, I tested the Natural Resource Damage Program as a possible source of funding for the conferences. I also assisted Mike McLane with the development of contracts with the University of Montana Departments of Geology and Geography and the Montana Bureau of Mines and Geology concerning the technical and policy ground water conferences. The Task Force will co-convene the technical conference with the Center for Riverine Science and Stream Re-Naturalization of Department of Geology and the policy conference with the UM Department of Geography during the fall of 2006. I made contacts with and/or confirmed the participation of the following speakers for these conferences:

Technical Conference Donna Cosgrove, Idaho Water Resource Research Institute, University of Idaho (confirmed)

Policy Conference Professor Robert Glennon (confirmed) Dr. Larry Swanson, Center for the Rocky Mountain West (confirmed) Governor Schweitzer (invited) James Steele, Jr., Chairman, Confederated Salish and Kootenai Tribes (invited) Commissioner Greg Chilcott, Chairman, Ravalli County Commission (invited) Commissioner Gail Jones, Chairman, Powell County Commission (invited) Dick Hoehne, City of Philipsburg (invited) Gary Marks, Whitefish City Manager (invited) Jon Sesso, Butte-Silver Bow planner (confirmed)

MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)

FROM: Gerald Mueller

SUBJECT: Summary of the April 4, 2006 Task Force Meeting

DATE: April 22, 2006

Participants

The following people participated in the Task Force meeting:

Task Force Members:

Harvey Hackett Bitterroot Water Forum

Bill Slack Flathead Joint Board of Control

Fred Lurie Blackfoot Challenge Matt Clifford Clark Fork Coalition

Jim Dinsmore Upper Clark Fork Steering Committee/Granite Conservation

District

Elna Darrow Flathead Basin Commission

Gail Patton Sanders County

Marc M. Spratt Flathead Conservation District/Flathead Chamber of

Commerce

Ex Officio

Rep. Verdell Jackson HD 6 Rep. Joey Jayne HD 15 Rep. Gary MacLaren HD 89

Staff:

Gerald Mueller Consensus Associates

Mike McLane Montana Department of Natural Resources and Conservation

(DNRC)

Other:

Phil Tourangeau Confederated Salish and Kootenai Tribes

Dr. David Shively UM Geography Department

Susan Cottingham Reserved Water Rights Compact Commission

Jody Miller USFS Tim Sullivan USFS Eric Johnston USFS

Meeting Agenda

- Ground Water Conference Update
- DNRC Ground Water-Surface Water Working Group
- Dr. David Shively Presentation on Water Right Marketing in New Mexico
- State of Montana USFS Water Right Compact
- Public Comment
- Schedule meeting

Ground Water Conference Discussion

Technical Conference - Gerald Mueller reported that he has made contact with University of Montana Geology Professor Bill Woessner and that the plan is to hold our technical conference in conjunction with the Riverene Center Conference this coming fall. An additional day will be added on Wednesday to address our subject and the conference would continue on Thursday and Friday. Space has been reserved in the University Center on the UM campus for our meeting. Mr. Mueller also passed out a pre-proposal for the pre-conference white paper prepared by Dr. Tom Patton of the Montana Bureau of Mines and Geology. The proposal is included below as Appendix 1. The Task Force reviewed and generally approved of the proposal. One comment on the proposal was to include information about the quality/scale/accuracy of the data available in each sub-basin. Another comment is that the Task Force intends the paper to have utility beyond the conference. For example, it should be a useful source of information about the basin's ground water for legislators and other policy makers and funders.

Since Dr. Patton's proposal included a \$13,400 price tag, the Task Force also identified potential sources of funding, including: DNRC, the Natural Resources Damage Program (NRDP), the Bonneville Power Administration (BPA), and Avista and PPL Montana and the basin's rural electric cooperatives. Some portion of the conference expenses might also be covered by registration fees. Mr. Mueller was directed to write a letter seeking funding to the DNRC and a pre-proposal to the NRDP. He was also asked to contact Stan Bradshaw about BPA funds and Holly Franz and Steve Fry/Nate Hall about utility funding. Marc Spratt agreed to contact the Flathead Electric Cooperative.

<u>Policy Conference</u> - The Task Force reviewed the one page summary of the policy conference that had been previously circulated to its members. Task Force members made the following suggestions. First, realtors should be added as a targeted interest and a representative of the Montana Association of Realtors should added to the Panel 2. Second, the conference day should be structured so that the morning is dedicated to first looking at population and economic trends and then asking Panels 1-3 to describe their existing water supply problems and their future expectations. The afternoon would be dedicated to a discussion of how the water appropriation and management system is changing, the Task Force's Hungry Horse initiative, and possible steps to address problems and prepare for the future.

DNRC Ground Water-Surface Water Working Group Recommendations

Mike McLane passed out copies of his March 3, 2006 memorandum to Mary Sexton explaining the recommendations of the Ground Water-Surface Water Working Group (Working Group) as well as draft statutory language to implement them. The draft statutory language is included below in Appendix 2. These recommendations were presented to the Environmental Quality Council at its March meeting. Although they had previously signed off on them, three agriculture groups stated at the meeting that they had concerns with language requiring augmentation to prevent depletions to surface water. These groups agreed to another Working Group meeting to seek a solution that would address their concerns. A meeting is scheduled for this purpose on April 6. The Task Force decided to await the outcome of this meeting before deciding whether to take a position on the Working Group recommendations.

Dr. David Shively Presentation

Dr. David Shively, an Assistant Professor of Geography at UM, summarized research he conducted for his doctorate on the effects of water marketing on third parties in New Mexico. New Mexico has water right laws generally similar to Montana's, including requirements for water right transfers. Unlike Montana, New Mexico does require a finding that a transfer be in the public interest. New Mexico has experienced numerous water right transfers from agriculture to municipal and mining uses. The water right purchases have generally involved

smaller agriculture operators. Dr. Shively continues to be interested in water use and would welcome an opportunity in the future to work with the Task Force on issues of mutual interest.

State of Montana - USFS Water Right Compact

Susan Cottingham, with the Montana Reserved Water Rights Compact Commission, and Jody Miller, Tim Sullivan, and Eric Johnston of the United States Forest Service (USFS) summarized the State-USFS negotiations towards a compact. Because USFS lands in Montana involve 750 watersheds, the state requested and the USFS has agreed not to pursue reserved water rights for instream flows on all USFS lands. Specific water rights will be sought for consumptive uses for ranger stations, camp grounds, fire fighting, etc., and an instream flow right will be established for the wild and scenic portion of the south fork of the Flathead River. The state has suggested that instead of instream flow rights with priority dates stemming from the time of the creation of each national forest for all lands but the south fork of the Flathead, that the USFS pursue instream flow reservations. The reservations would have priority dates determined by the date of the reservation applications. The state is convinced that in practice a water reservation would not be significantly different from an instream flow water right because the forests are almost always above diversionary uses. Also, the USFS controls use of its lands through special use permits. The state and USFS are discussing a sequencing that would require an applicant for permit for a new water use to obtain the appropriate special use permit before seeking the water right permit. The sequencing would apply for new water uses on USFS lands or when water would be conveyed across such lands for use on private lands intermingled with USFS lands. The amount of the water reservation on a given stream would be determined using the "wetted perimeter" technique developed by the Montana Department of Fish, Wildlife, and Parks to assess and meet the needs of the fishery. The wetted-perimeter technique identifies two flow values, a low flow associated with minimum fishery needs and a higher value that would allow the fishery to thrive. The USFS has identified about twenty watersheds in which a threatened or endangered or other high value fishery is significantly at risk. The state has agreed that the water reservation in these watersheds should be based on the wetted perimeter higher flow value. The state and the USFS are concerned about how basin closures would affect water reservation applications. For example, the upper Clark Fork River basin has a permit closure that precludes water reservation applications. Other areas of the Clark Fork basin have temporary closures with expirations triggered by completion of the state-wide water rights adjudication. The state and the USFS are considering whether exemptions to the closures may be needed. The negotiations are ongoing and no final decisions have been reached. The state hopes to have a compact completed with the USFS in 2007.

Public Comment

There was no additional comment.

Next Meeting

The next meeting scheduled for the first Monday in May, May 1. The agenda topics will include: the Hungry Horse negotiations, the ground water technical and policy conferences, the inter-state water allocation of water, and the Surface/Ground Water Working Group recommendations. Jack Stultz, DNRC Water Resources Division Administrator, who was unable to attend today's meeting, will be invited to discuss the inter-state water allocation topic.

Appendix 1 Pre-proposal: to the Clark Fork River Basin Task Force for preparation of a

Ground-Water Resource Overview: Clark Fork Basin, Montana by
Thomas W. Patton
Montana Bureau of Mines and Geology
April 2006

Introduction:

The Clark Fork River Basin Task Force plans to host a conference in the fall of 2006 for agency and private sector hydrologists, university scientists, well drillers, policymakers, and planners. The issues listed below, among others, will be discussed.

- What is known about the Clark Fork River Basin's ground water and its interaction with surface water?
- What/where are the aquifers?
- What do we need to know?
- How do we acquire that information?
- How do we handle the information?

The task force would like conference attendees to have a consistent set of basic information about the river basin's ground-water resources and has asked the Montana Bureau of Mines and Geology (MBMG) to prepare an overview of the ground-water resources covering the topics listed below:

Part 1: On a basin-wide scale

Using available geologic mapping, data from the Ground-Water Information Center (GWIC) database, data sets collected by the Ground-Water Assessment Program in the Flathead Lake, Lolo-Bitterroot, and Upper Clark Fork characterization areas, and data from the statewide water-level monitoring network, MBMG will develop a basin-wide summary that includes:

- Aquifer descriptions generally based on geologic mapping of Quaternary, Tertiary basin-fill sedimentary rocks, and bedrock. Illustrations could include:
 - 1. A location map showing the Clark Fork basin in Montana.
 - 2. Table of hydrogeologic properties including approximate geographic extents, general thicknesses (where data are available), geologic materials, expected well yields, etc.
 - 3. A basin map showing the approximate extent of aquifers based on geologic mapping. The map will likely be on a hill-shade base and will emphasize Quaternary, Tertiary basin-fill, and bedrock geology.
- Generalized descriptions of ground-water flow from areas of recharge, to areas of discharge. Illustrations could include:

- 1. Recharge scenarios including irrigation, precipitation, mountain front, and losing streams.
- 2. Discharge scenarios including pumping wells, gaining streams, and evapotranspiration.
- A discussion of ground-water storage trends based on water-level records from statewide monitoring well locations. Illustrations could include:
 - 1. A map showing locations of long-term statewide monitoring wells and period of record. Possibly including net change from beginning of record or departure from decadal average?
 - 2. Hydrographs from selected monitoring wells showing typical patterns and magnitudes of seasonal water-level change.

Part 2: sub basin summaries:

- Clark Fork River above the Blackfoot River (Deer Lodge, Rocker, Silver Bow valleys)
- Clark Fork River between Flathead and Blackfoot Rivers (Missoula Valley)
- Clark Fork River below Flathead River
- Flathead River above Perma. Montana
- Bitterroot River
- Blackfoot River, and the
- Rock Creek and Flint Creek drainages

The basins listed above would be summarized by discussing the geographic distribution of wells, well depths and yields; basin-wide drilling rates by year, the development rate in bedrock aquifers, water-quality statistics by aquifer, and well-use as reported by well logs. Illustrations could include:

- 1. A dot map showing raw distribution of wells on a geologic base (hillshade topography option). Also could possibly develop density of wells per section maps or statistics. Could develop statistics on the number of wells within a buffer distance of major streams.
- 2. Distribution of wells with depth through histograms and pie charts.
- 3. Yield statistics based on clipping the wells data using Quaternary, Tertiary basin-fill, and bedrock geographic extents (box plots).
- 4. Rate of new well drilling by year (histograms showing rate of development through cumulative curves) (histograms showing number of wells in bedrock at different times).
- 5. Water quality based on historic analyses available in GWIC, including box plots showing dissolved constituents? Nitrate distribution dot map?

Format:

We are envisioning an illustrated document of about 15-20 pages. Each sub-basin would get 2+/pages of text and illustrations depending on the amount of data available. The basin-wide overview would be 3-4 pages long. MBMG would produce the report for the conference and to be released within MBMG's Ground-Water Open File (GWOOF) series. We are currently thinking one-color printing but some sections of two-color might be possible depending on the

data, the layout, and the cost. An example of the type/quality of production is shown in MBMG Information Pamphlet 4 (IP-04).

Budget:

Personnel	Total
Hydrogeologist –	
2 months	\$ 7,776
Report production	\$ 568
Benefits	\$ 3,167
Operations	
Printing charges –	
250 copies at	
7.50/copy	\$ 1,875
Totals	\$13,386

We estimate that it will take a hydrogeologist 2 work months to download and groom GWIC data, create the illustrations, maps, and tables; and write the manuscript. MBMG is assuming that the funding would come from the Department of Natural Resources and Conservation (DNRC) and be considered state dollars. Other project agreements between MBMG and DNRC (Renewable Resource Grants, etc.) do not allow indirect costs in their budgets, but if funds for the report come from other sources, MBMG and Montana Tech policy may require that indirect costs be added. Should the Clark Fork Task Force desire to proceed with the project, a more detailed budget would be included in a formal agreement between MBMG and the Task Force.

Appendix 2 Surface Water/Ground Water Work Group Recommend for Statutory Change Augmentation, Ground Water Analysis & Basin Closure Amendments March 3, 2006

85-2-102 New Definition: "Augmentation Plan" means an arrangement, either temporary or permanent, to make water available for a new beneficial use in a water source or tributary through the development of a new or alternative water supply that reasonably prevents depletions to surface water where required or adverse effect to any water rights, or both.

New Section: "Municipality" means any incorporated city or town in the state organized and incorporated under Tide 7 chapter 2 Montana Code Annotated.

New Section: "Stock water" means the use of water to provide drinking water for livestock which includes, but is not limited to, cattle, sheep, swine, goats, horses, mules, asses, llamas, alpacas, bison, ostriches, rheas, emus, and domestic ungulates.

- **85-2-102.** (**Temporary**) **Definitions.** Unless the context requires otherwise, in this chapter. the following definitions apply:
 - (1) "Appropriate" means:
 - (a) to divert, impound, or withdraw, including by stock for stock water, a quantity of water for a beneficial use:
 - (b) in the case of a public agency, to reserve water in accordance with 85-2-316:
- (c) in the case of the department of fish, wildlife, and parks, to lease water in accordance with 85-2-436; or
- (d) temporary changes or leases for instream flow to maintain or enhance instream flow to benefit the fishery resource in accordance with 85-2-408.
 - (2) "Beneficial use", unless otherwise provided, means:
- (a) a use of water for the benefit of the appropriator, other persons, or the public, including but not limited to agricultural (including stock water), domestic, fish and wildlife, industrial, irrigation, mining, municipal, power, and recreational uses;
- (b) a use of water appropriated by the department for the state water leasing program under 85-2-141 and of water leased under a valid lease issued by the department under 35-2-141:
- (c) a use of water by the department of fish, wildlife, and parks pursuant to a lease authorized under 85-2-436; or
- (d) a use of water through a temporary change in appropriation right or lease to enhance instream flow to benefit the fishery resource in accordance with 85-2-408.
 - (e) a use of water for augmentation.
- **85-2-329. Definitions**. Unless the context requires otherwise, in 85-2-330 and this section, the following definitions apply:
- (1) "Application" means an application tor a beneficial water use pennit pursuant to 84-3-302 or a state water reservation pursuant to 85-2-316.
- (2) "Ground water" means water that is beneath the land surface or beneath the bed of a stream, lake, reservoir, or other body of surface water and that is not immediately or directly connected to surface water.
 - (3) "Nonconsumptive use" means a beneficial use of water that does not cause a reduction in

the source of supply and in which substantially all of the water returns without delay to the source of supply, causing little or no disruption in stream condition.

- (4) "Teton River basin" means the drainage area of the Teton River and its tributaries above the confluence of the Teton and Marias Rivers.
- **85-2-330. Basin closure-- exceptions.** (1) As provided in 85-2-319 and subject to the provisions of subsection (2) of this section, the department may not process or grant an application for a permit to appropriate water or for a reservation to reserve water within the Teton River basin.
 - (2) The provisions of subsection (1) do not apply to:
- (a) an application for a permit to appropriate round water when the application is accompanied by the report and augmentation plan as required by 85-2-337;
 - (b) an application for a permit to appropriate water for a nonconsumptive hydropower use:
- (c) an application for a permit to appropriate surface water for domestic, municipal <u>municipalities</u> or stock use;
- (d) an application to store water during high spring flows <u>in an impoundment with a capacity</u> of 30 acre-feet or more; or
 - (e) emergency temporary appropriations as provided for in 85-2-113 (3).
- (f) An application a permit to appropriate surface water to conduct response actions related to natural resource restoration required as
- i) <u>remedial actions pursuant to the federal Comprehensive Environmental Response</u>, <u>Compensation</u>, <u>and Liability Act of 1980</u>, <u>as amended</u>.
- ii) <u>Aquatic Resources mitigation activities done in compliance with and as required by</u> Federal Clean Water Act of 1977 (33 USC 1251- 1376), or
- iii) <u>remedial actions taken pursuant to Title 73, chapter 10, part 7 under Montana law.</u> A permit issued to conduct mitigation or remedial actions may not be used for dilution.
- (3) A change of use authorization for changing the purpose of use may not he issued any permit issued pursuant to subsections 2 b, c, e, and f.
- **85-2-335. Definitions.** Unless the context requires otherwise, in 85-2-335 through 85-2-338, the following definitions apply:
- (1) "Application" means an application for a beneficial water use permit pursuant to 85-2-302.
- (2) "Upper Clark Fork Riser basin" means the drainage area of the Clark Fork River and its tributaries above Milltown dam.
- **85-2-336. Basin closure--exception.** (1) As provided in 35-2-319 and subject to the provisions of subsection (2) of this section, the department may not process or grant an application for a permit to appropriate water within the Upper Clark Fork River basin.
 - (2) The provisions of subsection (I) do not apply to:
- (a) an application for a permit to appropriate around water when the application is accompanied by the report and augmentation plan as required by 85-2-337;
- (b) an application filed prior to January 1, 2000, for a permit to appropriate surface water to conduct response actions or remedial actions pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. or Title 75, chapter 10. part 7 at sites designated as of January 1, 1994. The total flow rates for all permits issued under this subsection (2)(b) may not exceed 10 cubic feet per second. A permit issued to conduct response actions or remedial actions may not he used for dilution and must be limited to a term not to exceed the necessary time to complete the response or remedial action, and the permit may not he transferred to any person for any purpose other than the designated response

or remedial action.

- (c) an application for a permit to appropriate surface water to conduct aquatic resources mitigation activities done in compliance with and as required by Federal Clean Water Act of 1977 (33 USC 1251- 1376). A permit issued to conduct mitigation actions may not he used for dilution.
 - (e d) an application for a permit to appropriate surface water for stock use:
- (d e) an application to store water <u>during high spring flows in an impoundment with capacity</u> of 50 acre-feet or more; or
- (e f) an application for power generation at existing hydroelectric dams. The department may not approve a permit for power generation if approval results in additional consumption of water.
- (3) A change of use authorization for changing the purpose of use may not be issued for any permit issued pursuant to subsections 2 b, c, d, and f.
- (3) Applications for state water reservations in the Upper Clark Fork River basin filed pursuant to 85-2-316 and pending as of May 1,1991, have a priority date of May 1, 1991. The filing of a state water reservation application does not provide standing to object under 85-2-402.
- (4) The department may not process or approve applications for state water reservations in the Upper Clark Fork River basin riled pursuant to 85-2-316.
- **85-2-337.** Ground water permit applications -- report required. (1) During the period of basin closure provided in <u>85-2-330</u>, 85-2-336(1), <u>85-2-340</u>, 85-2-342, 85-2-344, or any <u>administratively closed basin pursuant to 85-2-319</u>, an applicant for a ground water permit in the <u>Upper Clark Fork River a closed</u> basin shall submit a report prepared by a <u>professional engineer or hydrologist person educated and experienced in ground water science, addressing that analyzes the <u>hydrologic hydraulic</u> connection between the source of the ground water and surthce water <u>and that quantifies depletions to surface water that result from the proposed appropriation</u>. If the applicant fails to submit the report required in this section, the application is considered defective and must be processed pursuant to 85-2-301.</u>
- (2) Except as provided in subsection (3), the department may not issue a permit to appropriate ground water in the Upper Clark Fork River basin unless the applicant proves by a preponderance of evidence, in addition to the criteria of 85-2-311, that the source of the ground water is not a part of or substantially connected to surface water.
- (3) The department may issue a permit to appropriate ground water if the application includes an augmentation plan and if the applicant proves by a preponderance of evidence, in addition to the criteria of 85-2-311,that the augmentation plan provides for sufficient augmentation water in amount, time, and location to replace reasonably prevent depletions to surface water senior water rights.
- (3) Where an augmentation plan requires an "Application for Change of Appropriation Right under 85-2-402, that change application will be submitted with the "Application for Beneficial Water Use Permit" and its attached hydrologic report and augmentation plan. These applications will be evaluated in a combined proceeding.

85-2-339. Terminated. Sec. 6. Ch. 281. L. 1999.

- **85-2-340. Definitions.** Unless the context requires otherwise, in 83-2-341 and this section, the following definitions apply:
- (1) "Application" means an application for a beneficial water use permit pursuant to 85-2-302 or a state water reservation pursuant to 85-2-316.

- (2) "Ground water" means that water that is beneath the land or beneath the bed of a stream, lake, reservoir, other body of surface water and that is not immediately or directly connected to surface water.
- (3) "Jefferson River basin" means the drainage area of the Jefferson River and its tributaries above the confluence of the Jefferson and Missouri Rivers.
- (4) "Madison River basin" means the drainage area of the Madison River and its tributaries above the confluence of the Madison and Jefferson Rivers.
- (5) "Nonconsumptive use" means a beneficial use of water that does not cause a reduction in the source of supply and in which substantially all of the water returns without delay to the source of supply. causing little or no disruption in stream conditions.
- **85-2-341. Basin closure-- exceptions.** (1) As provided in 85-2-319 and subject to the provisions of subsection (2) of this section the department may not process or grant an application for a permit to appropriate water or for a state water reservation to reserve water within the Jefferson River basin or Madison River basin.
 - (2) The provisions of subsection (1) do not apply to:
- (a) an application for a permit to appropriate around water when the application is accompanied by the report and augmentation plan as required by 85-2-337;
 - (b) an application for a permit to appropriate water for a nonconsumptive <u>hydropower</u> use;
- (c) an application for a permit to appropriate surface water for domestic, municipal, municipalities or stock use;
- (d) an application to store water during high spring flows <u>in an impoundment with a capacity</u> of 50 acre- feet or more; or
 - (e) temporary emergency appropriations as provided for in 85-2-113(3).
- (f) <u>an application for a permit to appropriate surface water to conduct response actions related to natural resource restoration required as</u>
- i) remedial actions pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended,
- ii) Aquatic Resources mitigation activities done in compliance with and as required by Federal Clean Water Act of 1977 (33 USC 1251- 1376), or
- iii) <u>remedial actions taken pursuant to Title 73, chapter 10, part 7 under Montana law.</u> <u>A</u> permit issued to conduct mitigation or remedial actions may not be used for dilution.
- (3) A change of use authorization for changing the purpose of use may not he issued any permit issued pursuant to subsections 2 b, c, e, and f.
- 85-2-342. Definitions. Unless the context requires otherwise, in 85-2-343 and this section, the following definitions apply:
- (1) "Applications" means an application for a beneficial water use permit pursuant to 85-2-302 or a state water reservation pursuant to 85-2-316.
- (2) "Ground water" means water that is beneath the land surface or beneath the bed of a stream, lake, reservoir, or other body of water and that is not immediately or directly connected to surface water.
- (3) "Nonsumptive use" means a beneficial use of water that does not cause a reduction in the source of supply and in which substantially all of the water returns without delay to the source of supply causing little or no disruption in stream conditions.
- (4) "Upper Missouri River basin" means the drainage area of the Missouri River and its tributaries above Morony dam.
- **85-2-343. Basin closure-- exceptions.** (1) As provided in 85-2-319 and subject to the provisions

of subsection (2) of this section the department may not process or grant an application for a permit to appropriate water or for a state water reservation to reserve water within the Jefferson River basin or Madison River basin.

- (2) The provisions of subsection (1) do not apply to:
- (a) an application for a permit to appropriate around water when the application is accompanied by the report and augmentation plan as required by 85-2-337;
 - (b) an application for a permit to appropriate water for a nonconsumptive <u>hydropower</u> use;
 - (c) an application for a permit to appropriate surface water for domestic, municipal, municipalities or stock use;
 - (d) an application to store water during high spring flows in an impoundment with a capacity of 50 acre- feet or more; or
 - (e) an application for a permit to use water from the Muddy Creek drainage, which drains to the Sun River, if the proposed use of water will help control erosion in the Muddy Creek drainage; or
 - (f) temporary emergency appropriations as provided for in 85-2-113(3).
 - (g) An application for a permit to appropriate surface water to conduct response actions related to natural resource restoration required as
 - i) remedial actions pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended,
 - ii) <u>Aquatic Resources mitigation activities done in compliance with and as required</u> by Federal Clean Water Act of 1977 (33 USC 1251- 1376), or
 - iii) <u>remedial actions taken pursuant to Title 73, chapter 10, part 7 under Montana law.</u> A permit issued to conduct mitigation or remedial actions may not be used for dilution.
 - (3) A change of use authorization for changing the purpose of use may not he issued any permit issued pursuant to subsections 2 b, c, e, f, and g.

85-2-344. Bitterroot River subbasin temporary closure--definitions--exceptions.

- (1) Unless the context requires otherwise, in this section, the following definitions apply:
 - (a) "Application" means an application for a beneficial water use permit pursuant to 85-2-302; or a state water reservation pursuant to 85-2-316.
- (b) "Bitterroot River basin" means the drainage area of the Bitterroot River and its tributaries above the confluence of the Bitterroot River and Clark Fork of the Columbia River and designated as "Basin 76H".
- (c) "Bitterroot River subbasin" means one of the following hydrologically related portions of the Bitterroot River basin:
 - (i) the mainstem subbasin. designated as "Subbasin 76HA";
 - (ii) the north end subbasin. designated as "Subbasin 76HB":
 - (iii) the cast side subbasin, designated as "Subbasin 76HC";
 - (iv) the southeast subbasin. designated as "Subbasin 76HD":
 - (v) the south end subbasin, designated as "Subbasin 76HE";
 - (vi) the southwest subbasin. designated as "Subbasin 76HF";
 - (vii) the west central subbasin. designated as "Subbasin 76HG"; or
 - (viii) the northwest subbasin. designated as "Subbasin 76HH".
- (2) As provided in 85-2-319, the department may not processor grant an application for a permit to appropriate water or for a state water reservation within a Bitterroot River subbasin until the closure for the basin is terminated pursuant to subsection (3) of this section, except for:
 - (a) an application for a permit to appropriate ground water when the application is

accompanied by the report and augmentation plan as required by 85-2-337;

- (b) an application for a permit to appropriate surface water for a municipal a municipality's water supply:
 - (c) temporary emergency appropriations pursuant to 85-2-113 (3); or
- (d) an application to store water during high spring flow in an impoundment with a capacity of 30 acre-feet or more.
- (e <u>An application for a permit to appropriate surface water to conduct response</u> actions related to natural resource restoration required as
- i) remedial actions pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended,
- ii) <u>Aquatic Resources mitigation activities done in compliance with and as required</u> by Federal Clean Water Act of 1977 (33 USC 1251- 1376), or
- iii) <u>remedial actions taken pursuant to Title 73, chapter 10, part 7 under Montana law.</u> A permit issued to conduct mitigation or remedial actions may not be used for dilution.
- (3) Each Bitterroot River subbasin is closed to new appropriations and new state water reservations until 2 years after all water rights in the subbasin arising under the laws of the state are subject to an enforceable and administrable decree as provided in 85-2-406 (4).
- (5) A change of use authorization for changing the purpose of use may not be issued for any permit issued pursuant to subsections 2 b, c, and e.

MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)

FROM: Gerald Mueller

SUBJECT: Summary of the May 1, 2006 Task Force Meeting

DATE: May 3, 2006

Participants

The following people participated in the Task Force meeting:

Task Force Members:

Harvey Hackett Bitterroot Water Forum

Bill Slack Flathead Joint Board of Control

Fred Lurie Blackfoot Challenge Matt Clifford Clark Fork Coalition

Jim Dinsmore Upper Clark Fork Steering Committee/Granite Conservation

District

Nate Hall Avista

Holly Franz PPL Montana, LLC

Marc M. Spratt Flathead Conservation District/Flathead Chamber of

Commerce

Staff:

Gerald Mueller Consensus Associates

Mike McLane Montana Department of Natural Resources and Conservation

(DNRC)

Other:

Phil Tourangeau Confederated Salish and Kootenai Tribes (CSK&T)

Meeting Agenda

- HJR 3 Update
- Trout Unlimited Vs. DNRC Supreme Court Decision
- DNRC Ground Water-Surface Water Working Group Update
- Ground Water Conferences
- Public Comment
- Schedule meeting

HJR 3 Update

Gerald Mueller reported that he had spoken with Hal Harper, Governor Schweitzer's chief policy advisor about activities to implement HJR 3, the Hungry Horse resolution. Mr. Harper stated that he had visited with the Confederated Salish and Kootenai Tribes Chief Legal Council, John Carter, who indicated a willingness to consider a joint state-tribal approach to the Bureau of Reclamation to determine the process that would be followed if the state requests a contract for Hungry Horse water. Mr. Harper also asked about the state's rational for obtaining such a contract. Mike McLane stated that two dates have been identified for a meeting between state and tribal officials concerning Hungry Horse, either May 3 or May 23. He indicated that the May 3 date appears unlikely based on Mary Sexton's schedule. The Task Force agreed that Gerald Mueller and Mike McLane should draft an initial version of the rational for the state

contracts for Hungry Horse water based on the water availability in the basin, the purposes stated in the Hungry Horse project authorization, and the BOR water right filings. Concerning water availability, individual Task Force members noted that the CSK&T's most senior water right will likely affect water availability above the reservation, and Avista's objection to the Thompson Falls generation project's application for Clark Fork River water may have the effect of closing the entire basin to new surface water right permits. The recent Montana decision that will be discussed below may also mean that most ground water is also closed. The Task Force further agreed that its members and staff should continue to press for action to implement HJR 3.

Jack Stults was unable to attend today's meeting to discuss the possible need for a formal four state water quantity entity. He and his counter parts from Idaho, Oregon, and Washington will meet in either late May or early June to discuss the Washington effort to appropriate additional water from the Columbia River. He remains willing to meet with the Task Force to discuss the results of this meeting and a formal four state water quantity body.

Trout Unlimited Vs. DNRC Supreme Court Decision

Holly Franz reviewed the history and the significance of the recent Montana Supreme Court decision in Trout Unlimited et. al. Vs. DNRC et. al. In 1993, the legislature closed the upper Missouri River basin, including the Smith River, to most surface water permits and to ground water immediately and directly connected to surface water. Ground water not so connected was exempted from the closure. The availability of federal Environmental Quality Incentive Program funds from NRCS led farmers and ranchers in the Smith River drainage to install eighteen center pivots using water from new wells. These systems were installed before applications were made for ground water right permits. To decide whether the new wells were immediately and directly connected to the Smith River, DNRC applied what is commonly called the "cone of depression" test. Using this test, DNRC finds a "direct and immediate" connection between surface and ground water if a surface water source is within the cone of depression of the new well. DNRC began processing the permits for the eighteen new projects independently. Montana Trout Unlimited (TU) objected to DNRC's independent approach and asked the department to determine the cumulative impacts of the new wells on the Smith River. The DNRC did the cumulative analysis in an environmental assessment (EA). Although the EA found that the flow of the Smith River would be reduced by the new wells, based on the cone of depression test, DNRC continued the permit process for them. TU et. al. sued in district court to stop the permitting, and when the district court found in favor of DNRC, TU appealed to the Supreme Court. In its ruling, the district court deferred to the agency's discretion in determining the appropriate test for immediate and direct connection between surface and ground water. It also found that TU et. al. must exhaust their administrative remedies by participating in the permitting process before filing appealing DNRC's permit actions. The Supreme Court reversed the district court in both the definition of the immediate and direct connection test and when TU et. al. might seek court action to reverse the DNRC decision. The found that the legislature had directed that the DNRC must not process permits if it found the proposed well to be immediately and directly connected to surface water. It further found that the test for connection must include both "induced streambed infiltration," i.e., cone of depression test, and ground water capture, i.e., ground water tributary flow within the hydraulic gradient of the stream. Ms. Franz stated that this ruling probably would prevent DNRC from processing ground water permit applications for the development of alluvial aguifers in the basins with the immediate and direct language in their basin closure. These basins include the Teton, the upper Missouri, the Jefferson, and Madison River basins. She noted that the upper Clark Fork closure includes a different test for surface and ground water connection. This closure exempts ground water that is "...not a part of or substantially or directly connected to surface water" (85-2-337 MCA). However, the statutory reference to "directly connected" probably means that the ground water capture test applies, which may close ground water in alluvial aquifers in the upper Clark Fork. The Supreme Court decision may also affect ground water development in basins not closed. New ground water

developments in unclosed basins must demonstrate that they would not adversely affect existing water rights. DNRC will likely apply both the ground water capture and induced streambed infiltration tests to determine adverse affects.

DNRC Surface and Ground Water Working Group Recommendations

Mike McLane stated that the Working Group meets tomorrow and will consider the implications of the TU vs. DNRC Supreme Court decision to its recommendations. The Working Group may have more impetus to recommend deleting the "immediate and direct" or "part of or substantially or directly connected" language from all basin closures in return for an augmentation requirement. Mr. McLane noted that the Supreme Court decision may also tend to increase the use of the 35 gpm/10 acre feet per year exemption for new wells from the permitting process. Subdividers may have additional incentive to avoid installing community wells. The Working Group had already agreed that it could not reach agreement about changing this exemption, but Mary Sexton may ask the Working Group or another group to pursue amendment to this exemption.

Ground Water Conferences

<u>Conference</u> <u>Funding</u> - Gerald Mueller reported that DNRC has apparently allocated about \$25,000 to the Task Force for the following: the ground water technical and policy conferences, the pre-technical conference white paper, administrative support, and the Hungry Horse negotiations. Mike McLane stated that the specific breakdown of these funds is not clear; however, they must be committed prior to June 30, 2006. He must contract with either the Task Force Facilitator or some other entity such as a conservation district to act as the fiscal agent for and carry out one or more of these tasks.

<u>McLane Memo</u> - Mike McLane prepared and Mr. Mueller circulated to the Task Force via email prior to today's meeting, a memo discussing the structure and arrangements for the two conferences. His memo is attached below in Appendix 1. After discussing this memo, the Task Force agreed to the points noted below.

<u>Technical Conference</u> - The Force will continue to plan to hold the technical conference in association with the River Center conference in September. The technical conference would be one day on Wednesday, September 27, 2006. It will focus on the following questions:

- What do we know about the Basin's ground water and its interaction with surface water at a sub-basin scale?
- What do we need to know and how do we acquire that information?
- What tools and methodologies are available to manage ground water, accounting for surface and ground water interactions, at the sub-basin scale?

The Task Force also agreed to continue to pursue preparation of some sort of readable document summarizing the available information about basin ground water on a sub-basin scale.

The tentative agenda for the conference is as follows:

- Montana Bureau of Mines and Geology presentation summarizing available ground water information by sub-basin;
- Presentation(s) on the modeling tools that can define and/or predict the nature and extent of surface and ground water connections on a sub-basin scale;
- Presentation(s) on the methodologies used to assess surface and/or depletions ground water depletions from ground water appropriations;
- Other information, tools, and methodologies needed to manage ground water effectively and where or how they can be acquired.

• Next steps.

<u>Policy Conference</u> - The previous draft summary statement of the policy conference had the first of three phases consisting of a presentation by Dr. Larry Swanson of present and future basin population levels and economic activity to be followed by a DNRC prediction of the water use associated with those levels and that activity. Because of a concern that DNRC lacks the capability to make such a prediction, the Task Force suggested instead that Dr. Swanson's presentation be followed by discussions of the water use that resulted from rapid growth in Colorado and Idaho. Also an additional panel addressing policy and administrative tools for allocating water while protecting surface water was added to phase three of the conference. Finally, this conference will be held in the November 8 -17, 2006 period.

Next Steps - The Task Force agreed that:

- Mr. Mueller will revise the conference summary paper;
- Mr. Mueller will discuss the technical conference agenda with Dr. William Woessner with the UM River Center;
- Mr. Mueller will contract Dr. David Shively to see if the UM Geography Department would be a partner in convening the policy conference;
- Mr. McLane will confirm the details of the additional DNRC funding for the Task Force; and
- Mr. McLane will arrange a meeting with Tom Patton and/or Marvin Miller at the Bureau of Mines and Geology to discuss the technical conference white paper.

Public Comment

There was no additional comment.

Next Meeting

The next meeting scheduled for the first Monday in June, June 5 in.

Appendix 1

To: Marc Spratt and Gerald Mueller

From: Mike McLane CC: Task Force Topic: Conferences

Date: 3/3/06

In this memo I will:

- Provide a long overdue answer to Gerald's question related to duplication of symposia;
- Raise questions bout the inter-relatedness of the Task Force agenda and theme of the Technical Conference; and finally
- o Provide some suggestions that might maximize these opportunities.

As background, the Task Force has two activities in its work plan addressing ground water in Clark Fork. One is a policy round table with an invited basin audience. The other is a technical conference in the fall of 2006, to be held in conjunction with the River Center.

Policy Conference:

The Clark Fork Basin's policy conference will have a targeted audience including local, regional and tribal leaders, primarily from within the basin. The agenda will investigate: a) basin growth and projected growth, b) assessment by local governments of their current water supply and plans for future supply; and c) the water allocation and water supply options and alternatives in the basin.

To directly answer Gerald question about conference duplication, I do not think a Task Force "round table" will replicate the Northwest Water Policy and Law Symposium (September 18 & 19) or the River Center fall conference (Thursday Sept 21^{st} and Friday the 22^{nd}). The same is true for the other two water conferences that will be conducted in Western Montana this year. ¹

The Task Force round table plans to have focused, basin specific agenda that will engage basin leadership in a dialog about current and future water supply and demand. I would hope that the Task Force will be able collect and synthesize the comments from the participants as an aid to future planning efforts and to aid future water supply activities.

The round table might be enhanced and participants might be more prepared if we can:

- o Encourage basin leadership to attend the other conferences too, or
- o Capture and summarize key messages from the other gatherings, and then

¹ The National American Water Resources Association (AWRA) is hosting a summer specialty conference in Missoula, June 26 – 28, titled, "Adaptive Management of Water Resources". The Montana Section of AWRA is hosting their annual file meeting October 12 and 13, in Polson, MT. Their working title appears to be "Montana's Lakes and Wetlands, Improving Links to Integrated Water Resource Management".

o Conduct the Clark Fork Task Force Conference's Policy Conference later in the year.

Technical Meeting:

At this point, the Task Force is looking at a technical conference targeted on the following questions:

- What do we know about the Basin's ground water and its interaction with surface water?
- What do we need to know?
- o How do we acquire that information?

After visiting with Gerald, the River Center's 2006 Conference, "Floodplains and Rivers - Connections and Reconnections" will focus on the effectiveness of stream and stream side restoration efforts in 'recreating' functional systems.²

The Center is likely to have a better sense of "cutting edge" technical / scientific investigations or critiques related to the integrated management of surface and ground water. Working with the River Center will result in advantages in rooms, publication and audience. However, I do not see a strong correlation between what the Task Force has outlined as a "need" and what the Center has outlined as a theme. Further our discussions have included the creation of a "white paper" that acts as a summary of the basin's water resources.

Perhaps we should rethink our conference approach considering that:

- We do not have the funds for the white paper,
- o A similar but less detailed document was developed by the USGS in 1996,³ and
- o Our conference sponsor has developed a slightly different theme,

If the Task Force, in an adjacent section that might precede the main conference (after noon and evening of September 20) built upon the theme of connections and reconnections, we could attain a mutually beneficial activity. Maybe we should host a series of presentations that address the connection of ground water to rivers and flood plains (surface water). Through presentations by invited speakers, we could look at the scientific and technical aspects of managing ground water where it is a connected resource or where the depletions from new ground water appropriations are being mitigated. For example, it would be helpful to examine:

- o Tools (models, processes or management activities) to define the nature and extent of the interconnectedness and to predict relationships,
- o Methods of assessing depletions resulting from ground water appropriations.

² Past River Center Conference's include: *Floodplains and Rivers: Connections and Re-Connections*, Sept 22 & 23, 2005, *Assessing and Re-naturalizing Streams Impacted by Dams and Dam Removal*, Sept 23 & 24 2004, "Assessing and Re-naturalizing Streams impacted by Mining", Sept. 25 & 26, 2003

³ "Geographic, Geologic and Hydrologic Summaries of Intermountain Basins of the Northern Rocky Mountains, Montana, USGS, Water Resources Investigation report 96-4025, Kendy and Tresch, August 1996, Helena MT

- o Policy and administrative tools for allocating ground water while protecting surface water conditions (i.e. augmentation, ground water storage, water banking, water trades etc.), and
- o How current management assesses, protects, or enhances surface water resource uses and values.

This examination could be enhanced by looking at what other states are doing and what information they needed for management and analysis. Many of our neighboring states are all ready being asked to manage surface and ground water as connected resources. We could benefit from looking at current research, modeling and other regional efforts integrate management. This might allow us to "barrow or steal tools" as well as to prioritize areas of concern and data collection.

Attachment

To encourage additional discussion attached are several references to work being done in other westerns states. These are titles or authors located on the web and some authors recommended by my co-workers.

Idaho:

- Snake River Basin Surface Water-Ground Water Interaction, Dr. Gary Johnson, Donna Cosgrove and Mark Lovell, Idaho Water Resource Research Institute, University of Idaho, December 1998. http://www.if.uidaho.edu/~johnson/ifiwrri/sr3/home.html
- Phase II Evaluation of Managed Recharge on the Eastern Snake River Plain Development of Recharge Facilities, David Blew, Id Dept. Water Resources
- o Procedures for Estimating Depletion in the Lower Bear River Basin In Idaho, Robert Hill P.E. PhD. Logan Utah, January 27, 2003.

Washington / Idaho

- Both Idaho and Washington are looking at the Rathdrum Spokane Aquifer and studying characteristics of that unit. (Interestingly Washington clearly identifies issues with reduced recharge to streams in their introduction to a Spokane Valley Rathdrum.) Idaho Water Resources link http://www.idwr.idaho.gov/hydrologic/projects/svrp/
- Caldwell, R.R., and Bowers, C.L., 2003, <u>Surface-water/ground-water interaction</u>
 of the Spokane River and the Spokane Valley/Rathdrum Prairie Aquifer, <u>Idaho</u>
 and <u>Washington</u>: U.S. Geological Survey Water-Resources Investigations Report
 03-4239, 60 p.
- Kahle, S.C., Harrington, H., and Gregory, G., 2005, <u>Hydrologic investigation and ground-water flow model of the Rathdrum-Spokane Aquifer, Kootenai County, Idaho and Spokane County, Washington [abs.]</u>: 5th Washington Hydrogeology Symposium, Tacoma, Washington, April 12-14, 2005, Program, p. 101. (PDF, 2.13 MB)

Kansas:

- Kansas Geological Survey Stream Aguifer Interactions web page http://www.kgs.ku.edu/StreamAq/index.html
 - a) Butler, J.J., Jr., Zlotnik, V.A., and Tsou, M.S., Drawdown and stream depletion produced by pumping in the vicinity of a partially penetrating stream, Ground Water, v. 39, no. 5, p. 651-659. (Abstract)
 - b) <u>Evaluation of Stream Depletion Considering Finite Stream Width, Shallow Penetration, and Properties of Streambed Sediments</u> by Vitaly A. Zlotnik, Huihua Huang, and James J. Butler, Jr.
 - c) <u>Mathematical Derivation of Drawdown and Stream Depletion Produced by Pumping in the Vicinity of a Finite-Width Stream of Shallow Penetration</u> by James J. Butler, Jr., and Ming-Shu Tsou
- o Computer Software:
 - a) A Web-Based Program for Computation of Pumping-Induced Drawdown and Stream Depletion

- b) The StrpStrm model for calculation of pumping-induced drawdown and stream depletion--An executable program to download and sample data.
- Sophocleous, M.A., 2003. Environmental implications of intensive groundwater use with special regard to streams and wetlands. In: E. Custodian and R. Llamas (eds.), Groundwater Intensive Use: Challenges and Opportunities. A.A. Balkema Publishers, Lisse, The Netherlands, p. 93-112.
- Sophocleous, M.A., 1998. On the elusive concept of safe yield and the response of interconnected stream-aquifer systems to development. In: Sophocleous, M.A. (ed.). Perspectives on Sustainable Development of Water Resources in Kansas. Kansas Geological Survey, Bulletin 239, p. 6-85.
- o Sophocleous, M.A., 2004. Groundwater recharge and sustainability in the High Plains aquifer in Kansas, USA. Hydrogeology Journal, in press.
- o Sophocleous, M.A., 2004. Hydro-ecological principles for sustainable water resources management. 2004 NGWA Ground Water Expo, Las Vegas, Nevada
- Sophocleous, M.A., 2003. Environmental consequences of groundwater overexploitation: the hydrologic fundamentals. In: Wang, Y. (ed.), Proceedings of the International Symposium on Water Resources and the Urban Environment, 9-10 November 2003, Wuhan, P. R. China, China Environmental Science Press, p. 25-29.
- o *Sophocleous, M.A., 2002. Interactions between groundwater and surface water: The state of the science. Hydrogeology Journal, 10(1): 52-67.
- Ramireddygari, S. R., Koelliker, J.K., Tracy, J.C., and <u>Sophocleous, M.A.</u>, 1998.
 Decision Support System (DSS) for basin-wide water resources management.
 Proceedings, ASCE International Water Resources Engineering Conference,
 Memphis, TN, v.2, p.1787-1792

Colorado / Nebraska:

- o Dick Wolfe, P.E., Colorado Division of Water Resources
 - a) Running the River: Water Rights in the Marketplace: Law, Hydrology and Reality October 7, 2005
 - b) Regulation of Well Pumping in the South Platte River Basin October 7, 2005,
 - c) <u>Surface Water and Ground Water Administration in Colorado, "Water 101"</u> February 24, 2004
- Ground-Water Resources of the South Platte River Basin in Western Adams and Southwestern Weld Counties, Colorado,: <u>Rex O. Smith</u>; <u>Paul A. Schneider Jr.</u>; <u>Lester</u> R. Petri; <u>GEOLOGICAL SURVEY WASHINGTON DC</u>
- o The Geological Society of America, 2002 Denver Annual Meeting Oct 27-30 2005, Denver CO. Selected presentations"
- HYDROGEOLOGIC INVESTIGATION INTO THE EFFECTS OF MANAGED RECHARGE ON WATER QUALITY, LOWER SOUTH PLATTE RIVER, CO: WATT, Jamey T., SANFORD, William E., and STEDNICK, John, Earth Resources, Colorado State Univ, Fort Collins, CO 80523-1482, jameywatt@yahoo.com
- COHYST NEBRASKA'S DECISION SUPPORT SYSTEM FOR MEETING THE OBLIGATIONS OF THE PLATTE RIVER COOPERATIVE AGREEMENT: LEWIS, Gary L., Parsons, 1700 Broadway, Suite 900, Denver,

- CO 80290, Gary.L.Lewis@Parsons.com, WOODWARD, Duane, Central Platte Nat Rscs District, Nebraska, 215 Kauffman Avenue, Grand Island, NE 68803, and KERN, Rich, Nebraska Department of Natural Resources, Lincoln, NE
- ESTIMATING GROUND-WATER DISCHARGE TO STREAMS FOR USE IN THE NEBRASKA COOPERATIVE HYDROLOGY STUDY (COHYST) MODEL CALIBRATION: LUCKEY, Richard R., U.S. Geol Survey, Denver Federal Center, Bldg. 53, Box 25046, M/S 406, Lakewood, CO 80225, rrluckey@usgs.gov, CARNEY, Clint P., Water Resources Division, Nebraska Public Power District, 402 E. Statefarm Rd, North Platte, NE 69101, PETERSON, Steven M., Central Nebraska Public Power and Irrigation District, P.O. Box 740, 415 Lincoln Street, Holdrege, NE 68949, and WOODWARD, Duane A., Central Platte Natural Resources District, 215 N. Kaufman Ave, Grand Island, NE 68803
- O A COMPARISON BETWEEN STREAM DEPLETION LINES COMPUTED WITH GROUNDWATER-FLOW MODELS AND A CLASSIC ANALYTICAL METHOD FOR THE NEBRASKA COOPERATIVE HYDROLOGY STUDY: CARNEY, Clint P., Water Resources Division, Nebraska Public Power District, 402 E. Statefarm Rd, North Platte, NE 69101, cpcarne@nppd.com, LUCKEY, Richard R., U.S. Geol Survey, Denver Federal Center, Bldg. 53, Box 25046, M/S 406, Lakewood, CO 80225, PETERSON, Steven M., Central Nebraska Public Power and Irrigation District, P.O. Box 740, 415 Lincoln Street, Holdrege, NE 68949, and CANNIA, James C., North Platte Nat Rscs District, 1054 Rundell Rd, Gering Industrial Tract, Gering, NE 69341

MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)

FROM: Gerald Mueller

SUBJECT: Summary of the June 5, 2006 Task Force Meeting

DATE: June 6, 2006

Participants

The following people participated in the Task Force meeting:

Task Force Members:

Gail Patton Sanders County Commissioner Bill Slack Flathead Joint Board of Control

Fred Lurie Blackfoot Challenge

Jim Dinsmore Upper Clark Fork Steering Committee/Granite Conservation

District

Nate Hall Avista

Holly Franz PPL Montana, LLC

Marc M. Spratt Flathead Conservation District/Flathead Chamber of

Commerce

Ex Officio

Rep. Joey Jayne HD 15

Staff:

Gerald Mueller Consensus Associates

Mike McLane Montana Department of Natural Resources and Conservation

(DNRC)

Other:

Phil Tourangeau Confederated Salish and Kootenai Tribes (CSK&T)

Dr. David Shively UM Department of Geography

Meeting Agenda

- May 1, 2006 Meeting Summary
- HJR 3 Update
- Ground Water Conferences
- DNRC Ground Water-Surface Water Working Group Update
- Ground Water Conferences
- Thomson Falls Cogeneration Water Rights Decision
- Public Comment
- Schedule meeting

May 1, 2006 Meeting Summary

The Task Force made no change to the May 1 meeting summary.

HJR 3 Update

Gerald Mueller reported that in response to his inquiry, Mary Sexton emailed him that the meeting between the state and the Tribes to discuss the Hungry Horse as a source of water for additional water development in the Clark Fork basin is scheduled for June 6. No additional progress towards negotiations with the Bureau of Reclamation (BOR) has occurred. Mr. Mueller reported that he and Mike McLane have been requested to report to the Environmental Quality Council in mid-July. At this point, the only progress to report is the briefing by the BOR about its models for scheduling water deliveries out of Hungry Horse.

Ground Water Conferences

<u>Conference</u> <u>Funding</u> - Mike McLane reported that three sources of funding exist for the Task Force's two ground water conferences: the RIT funds made available by DNRC, unexpended Task Force appropriations, and conference fees. The amount of the RIT funds is shown in the following table:

RIT Funding Allocations

Funding Category	Activity	Amount
Technical Conference	Bureau of Mines White Paper	\$5,000
	Event expenses (speakers, summary report, printing, meals, rooms, etc.)	\$5,000
Policy Conference	Event expenses (speakers, summary report, printing, meals, rooms, etc.)	\$3,500
Task Force Administration	Conference planning and facilitation and Task Force meals and mileage	\$3,000
Clark Fork Basin Round table	Facilitation, planning, & event expenses	\$10,000
Total		\$26,500

The Clark Fork Basin Round table is intended to be a meeting of all watershed groups in the basin. Such a meeting was proposed in the *Clark Fork Basin Watershed Management Plan*. This meeting, however, would not be related directly to the ground water conferences.

<u>Conference</u> <u>Budgets</u> - Mike McLane also provided the following preliminary budgets for the technical and policy conferences.

Technical Conference Budget

Technical conference Budget				
Expenses		Revenues		
Item	Amount	Source	Amount	
Facilitation and planning	\$1,000	RIT	\$11,500	
MBMG presentation	\$5,700	Registration Fee (100 @ \$25)	\$2,500	
Pre-conference paper printing	\$500			
Room rental and audio visual charges	\$500			
Promotion	\$100			
Modeling tools panel speakers	\$1,700			
Assessment methodology speakers	\$1,400			
Meals and snacks	\$1,500			

Summary report preparation	\$1,100	
Summary report printing & distribution	\$500	
Total	\$14,000	\$14,000

Policy Conference Budget

Expenses		Revenues	
Item	Amount	Source	Amount
Facilitation and planning	\$1,000	RIT	\$5,000
Promotion	\$100	Registration Fee (100 @ \$25)	\$2,500
Speakers	\$2,500	Unspent Task Force FY 2006 funds	\$700
Panel mileage	\$700		
Meals and snacks	\$1,500		
Student support	\$800		
Summary report preparation	\$1,100		
Summary report printing & distribution	\$500		
Total	\$8,200		\$8,200

Technical Conference Agenda - The Task Force discussed and agreed to the agenda included below in Appendix 1. For the "Ground Water Modeling Tools" agenda topic, the Task Force agreed to invite a staff modeler at the Montana Bureau of Mines and Geology Dr. Marios A. Sophocleous, who is a senior scientist in geohydrology with the Kansas Geological Survey. For the "Assessment Methodology" panel, the Task Force agreed to invite scientists who have worked on the Snake and Rathdrum aquifers. For the Snake, people that could be invited include Dr. Gary Johnson, Assistant Professor of Geology and Geologic Engineering with University of Idaho at Idaho Falls, or Donna Cosgrove with the Idaho Water Resource Research Institute, University of Idaho. For the Rathdrum aquifer, an invitation could be extended to Rod Caldwell with USGS Helena Office. Mr. Caldwell is now the project chief for the USGS Smith River ground water-surface water interaction study. He formerly worked on the USGS study of the Rathdrum aquifer ground water-surface water interactions. Steve Kilbreath who heads the Subdividsion Review Section of the Montana Department of Environmental Quality should also be considered for this panel.

<u>Policy Conference Agenda</u> - The Task Force decided to limit this conference to one day, preferably on November 9. The agenda approved by the Task Force is included below in Appendix 2. Tentative panel members to be invited are listed on the agenda.

DNRC Surface and Ground Water Working Group Recommendations

Mike McLane reported that the Working Group has met once since the Last Task Force meeting. The discussion focused on two issues. One was a proposal by a Working Group member to revise the permitting process so that an application would be filed with the DNRC, but the decision on the application would be made by an independent entity. The proceeding would be changed from an administrative to something more akin to a judicial process. The Working Group asked for more information about how the process would work. Also considered was an

amendment to the existing 35 gallons per minute - 10 acre feet permit exemption for domestic wells. The ideas included reducing the volume cap, allowing the exemption for only the first five lots in a subdivision, and requiring individual lot owners in a subdivision to pay into an augmentation account. The funds would be used to augment the total consumption of all wells in the subdivision. Again, the Working Group took no action on these proposals.

Thomson Falls Cogeneration Water Rights Decision

Gerald Mueller passed out a copy of the proposed decision for the surface water right permit application submitted by Thompson River Lumber Company. The proposed decision issued by the DNRC hearings examiner is to deny the permit. The basis for the denial is the applicant's failure to prove that "water can reasonably be considered legally available." Continuing to quote from the proposed decision:

Applicant has shown in non-drought years sufficient unappropriated water will be physically available at the point of diversion to supply the amount requested only for 16 to 24 days throughout the period of appropriation (January 1 through December 31). An applicant must prove that, at least in some years, sufficient unappropriated water will be physically available at the point of diversion to supply the amount requested throughout the period of appropriation, and that at least in some years, no legitimate calls for water will be made on him by a senior appropriator. In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson (1992). However, Applicant has not shown that legitimate calls for water will not be made on him by a senior appropriator in at least some years. Here, Applicant could expect calls for water for all but 16 to 24 days of each year. Mont. Code Ann. § 85-2-311(1)(a)(ii). See Finding of Fact Nos. 7, 8. 6. The Applicant has not proven that the water rights of prior appropriators under existing water rights, certificates, permits, or state reservations will not be adversely affected when conditioned according to the plan to have downstream senior appropriators call the source when their rights are not being met. In the situation at hand, the evidence is that Objector Avista will not likely be able to look at their measuring gauge and know that river flows have been reduced by 250 gpm (i.e. that Applicant's pump is running). That does not mean Objector Avista is not adversely affected. At flows less than 50,000 cfs. Objector Avista would be short 250 gpm at times Applicant's pump is running. Objector Avista would have to call the Applicant to find out if Applicant's pumps are running. Applicant's plan would have Avista call Applicant to see if they are pumping, then decide if they must call the source rather than have the Applicant call to make sure water is available for use prior to turning on the pump. The burden in Applicant's plan is on the wrong appropriator. Avista would be short 250 gpm in all but 16-24 days per year when their reservoir is full and the project is spilling water.

Task Force members stated that this decision appears to reject a test that an adverse impact must be measurable. As a result, this decision would appear to close the basin to new water rights permits for surface water and ground water immediately and directly connected to surface water. Possible next steps in this permitting process are:

- The applicant may file a petition to the DRNC asking that the decision be reconsidered;
- The DRNC will hold a hearing on the petition limited to consideration of the facts in the record:
- The DNRC will write a final order, which then is subject to judicial review in district court.

Public Comment

There was no additional comment.

Task Force Member Assignments

Task Force members agreed to identify individuals or organizations that should be invited to participate in the technical and policy conferences and to send the names to Gerald Mueller (gmueller@montana.com or 440 Evans, Missoula, MT 59801).

Next Meeting

The next meeting scheduled for the first Thursday in July 6, 2006. Jack Stultz will be invited to participate in the next meeting to discuss actions by downstream states to increase use of Columbia River water and the possibility of creating a new formal interstate body to consider water quantity issues.

Appendix 1 Managing Clark Fork River Basin Ground Water Preliminary Technical Conference Agenda September 27, 2006

I. 8:00 AM, Registration

II. 8:30 AM, Welcome

Gerald Mueller will welcome participants, introduce the Task Force, and set out the conference goals and agenda.

III. 8:45 AM, What Do We Know About Clark Fork Basin Ground Water?

Tom Patton, Montana Bureau of Mines and Geology will overview existing ground water information for the Clark Fork River basin by sub-basin.

IV. 9:45 AM, Break

V. 10:00 AM, Ground Water Modeling Tools

A panel of speakers will present modeling tools in use to define and/or predict the nature and extent of surface and ground water connections on a sub-basin scale. Possible speakers include Dr. Marios A. Sophocleous, Senior Scientist in geohydrology with the Kansas Geological Survey and a modeler from the Montana Bureau of Mines and Geology.

VI. Noon, Lunch

Lunch will be provided to conference participants (UM sandwich buffet). Luncheon speaker (Mary Sexton, Tim Hall?) will address TU vs DNRC and its significance to ground water development.

VII. 1:00 PM, Assessment Methodologies

A panel of speakers will present and discuss methodologies used to assess surface and/or depletions ground water depletions from ground water appropriations. Possible speakers include: Dr. Gary Johnson, Assistant Professor of Geology and Geologic Engineering, University of Idaho at Idaho Falls; Donna Cosgrove, Idaho Water Resource Research Institute; University of Idaho; Rod Caldwell, USGS Helena Office; and Steve Kilbreath, Subdividsion Review Section, the Montana Department of Environmental Quality.

VIII. 3:00 PM, Break.

IX. 3:15 PM, Ground Water Management Needs

Marc Spratt will lead a discussion with conference participants of what information, tools, and assessment methodologies are needed to management ground water effectively in the Clark Fork River basin.

X. 4:00 PM, Wrap Up

A Task Force member (Jim Dinsmore?) will summarize conference and discuss next steps.

XI. 4:30 PM, Adjourn.

Appendix 2

Managing Clark Fork River Basin Ground Water Preliminary Policy Conference Agenda November 9, 2006

I. 8:00 AM, Registration

II. 8:30 AM, Welcome

Gerald Mueller will welcome participants, introduce the Task Force, and set out the conference goals and agenda.

III. 8:45 AM, Clark Fork Basin Economic and Demographic Trends

Dr. Larry Swanson, Center for the Rocky Mountain West, (to be invited) will overview present and projected future Clark Fork basin population levels and economic trends.

IV. 9:45 AM, Break

V. 10:00 AM, Effect of Population and Economic Growth on Water Use

Robert Glennon Morris K. Udall Professor of Law and Public Policy (Confirmed)

VI. 11:00 AM, Water Supply Assessment

The first of three panels will address present and future water supply issues/problems. Panel 1- Tribal and local government elected officials (e.g., Chairman Steele, Mayors of Polson and Thomson Falls, and Commissioners from Ravalli and Deer Lodge Counties) will answer the following questions:

- What water supply problems are you currently experiencing?
- What water supply problems do you foresee over the next 50 years?
- How are you addressing these problems?

VI. Noon, Lunch

Luncheon Speaker - Governor Schweitzer (To be invited.)

VII. 1:00 PM, Water Supply Assessment Continued

Panel 2 - Tribal and local government planners (e.g., Clayton Matt; Jon Sesso, Butte Silver Bow Planner; Whitefish planner; Dick Hoehne, Philipsburg) will address the following questions:

- What planning activities are underway to meet future water demands?
- What are your current and projected water supply needs?
- What planning and management issues do you face?
- What tools do you need to address them?

VIII. 2:00 PM, Water Supply Assessment Continued

Panel 3 - Water users/interests (irrigation districts, private water supply company, and realtors) will address the following questions

- What water supply problems are you currently experiencing?
- What water supply challenge do you foresee over the next 50 years?
- How are you addressing these problems/challenges?

IX. 3:00 PM, Break.

X. 3:15 PM, Policy and Administrative Tools

Dr. David Shively and Mike McLane will address policy and administrative tools for allocating ground water while protecting surface water conditions (i.e. augmentation, ground water storage, water banking, water trades etc.)

XI. 4:15 PM, Conference Wrap Up

A Task Force member (e.g., Jim Dinsmore) will summarize conference and discuss next steps.

XII. 4:45 PM, Adjourn.